

CLAIMS

1. A method for sending a processed image, comprising one or more elements, from a server to a client for construction and display, said method comprising the steps of: determining the parameters for data transfer from the server to the client; determining the capabilities of the client; determining the task requirements; and apportioning the processing between the server and the client for each element to meet the task requirement.
2. A method, according to claim 1, wherein said parameters for data transfer from said server to said client include one, all or some of: the transmission bandwidth of said server; the reception bandwidth of said client; the bandwidth of said data channel; the transmission protocol employed between said server and said client; and the accessibility of the channel employed between said server and said client.
3. A method, according to claim 1 or claim 2, wherein said capabilities of said client include one, all or some of: the data processing speed of said client; the available memory of said client; the size of display in said client; and the data processing software available within said client.
4. An method, according to any one of the preceding claims, wherein said task requirements comprise one, all or some of: the maximum time from transmission to display of the image; and the minimum display resolution of the image.
5. A method, according to any one of the preceding claims, wherein each element can be constructed for display using a selectable one of a plurality of processing options, said method

including the step of selecting an option that meets the task requirements.

6. A method, according to claim 5, wherein said step of selecting said processing option includes the step of measuring or calculating the time to execute of some or all of the plurality of options.

7. A method, according to any one of the preceding claims, wherein said construction of an element can comprise one, all or some of: clothing a coarse mesh with a simple texture; clothing a fine mesh with a simple texture; clothing a coarse mesh with a complex texture; clothing a fine mesh with a complex texture; clothing a surface with a complex texture; clothing a surface with a simple texture; and clothing a surface with a three dimensional panel.

8. A method, according to any one of the preceding claims, wherein said apportioning of the processing between said server and said client includes the step of allocating the location for each action in the construction of an element.

9. A method, according to any one of the preceding claims, wherein said determining of said capabilities of said client includes the step of interrogation of said client by said server.

10. A method, according to claim 9, wherein said interrogation of said client includes said client informing said server of said client's abilities.

11. A method, according to any one of the preceding claims, wherein said determining of said capabilities of said client can include reference, by said server, to a list of client characteristics for a plurality of different types of client.

12. A method, according to any one of the preceding claims, wherein said meeting of task requirements includes: falling within the minimum time to execute; and being the fastest to execute.

13. A method, according to any one of the preceding claims, wherein said server is a server in a mobile telephone system, and said client is a mobile telephone device.

14. A system, operative to send a processed image, comprising one or more elements, said system comprising: a server, operative to send the image; a client, operative to receive, construct and display the image; parameter determination means, operative to determine the parameters for data transfer from said server to said client; capability determination means, operative to determine the capability of said client; task requirements determination means, operative to determine the task requirement; and processing apportioning means, operative to apportion the processing between said server and said client for each element to meet said task requirement.

15. A system, according to claim 14, wherein said parameters for data transfer from said server to said client include one, all or some of: the transmission bandwidth of said server; the reception bandwidth of said client; the bandwidth of said data channel; the transmission protocol employed between said server and said client; and the accessibility of the channel employed between said server and said client.

16. A system, according to claim 14 or claim 15, wherein said capabilities of said client include one, all or some of: the data processing speed of said client; the available memory of said client; the size of display in said client; and the data processing software available within said client.

17. A system, according to any one of claims 14 to 16, wherein said task requirements comprise one, all or some of: the maximum time from transmission to display of the image; and the minimum display resolution of the image.

18. A system, according to any one of claims 14 to 18, wherein each element can be constructed for display using a selectable one of a plurality of processing options, said system including selection means, operative to select an option that meets the task requirements.

19. A system, according to claim 18, wherein said selection means is operative to measure or calculate the time to execute of some or all of the plurality of options.

20. A system, according to any one of claims 14 to 19, wherein said construction of an element comprises one, all or some of: clothing a coarse mesh with a simple texture; clothing a fine mesh with a simple texture; clothing a coarse mesh with a complex texture; clothing a fine mesh with a complex texture; clothing a surface with a complex texture; clothing a surface with a simple texture; and clothing a surface with a three dimensional panel.

21. A system, according to any one of claims 14 to 20, wherein said process apportioning means includes means to allocate the location for each action in the construction of an element.

22. A system, according to any one of claims 14 to 21, wherein said capability determination means is operative to interrogate said client from said server.

23. A system, according to claim 22, wherein said interrogation of said client includes said client informing said server of said client's abilities.

24. A system, according to any one of claims 14 to 23, wherein said capability determination means is operative to cause said server to reference a list of client characteristics for a plurality of different types of client.

25. A system, according to any one of claims 14 to 24, wherein said meeting of task requirements includes: falling within the minimum time to execute; and being the fastest to execute.

26. A system, according to any one of claims 14 to 25, wherein said server is a server in a mobile telephone system, and said client is a mobile telephone device.

27. A server, operative to send a processed image, comprising one or more elements, to a client, operative to receive, construct and display the image said server comprising: parameter determination means, operative to determine the parameters for data transfer from said server to said client; capability determination means, operative to determine the capability of said client; task requirements determination means, operative to determine the task requirement; and processing apportioning means, operative to apportion the processing between said server and said client for each element to meet said task requirement.

28. A server, according to claim 27, wherein said parameters for data transfer from said server to said client include one, all or some of: the transmission bandwidth of said server; the reception bandwidth of said client; the bandwidth of said data channel; the transmission protocol employed between said server and said client; and the accessibility of the channel employed between said server and said client.

29. A server, according to claim 27 or claim 28, wherein said capabilities of said client include one, all or some of: the data

processing speed of said client; the available memory of said client; the size of display in said client; and the data processing software available within said client.

30. A server, according to any one of claims 27 to 29, wherein said task requirements comprise one, all or some of: the maximum time from transmission to display of the image; and the minimum display resolution of the image.

31. A server, according to any one of claims 27 to 30, wherein each element can be constructed for display using a selectable one of a plurality of processing options, said server comprising including selection means, operative to select an option that meets the task requirements.

32. A server, according to claim 31, wherein said selection means is operative to measure or calculate the time to execute of some or all of the plurality of options.

33. A server, according to any one of claims 27 to 32, for use where said construction of an element comprises one, all or some of: clothing a coarse mesh with a simple texture; clothing a fine mesh with a simple texture; clothing a coarse mesh with a complex texture; clothing a fine mesh with a complex texture; clothing a surface with a complex texture; clothing a surface with a simple texture; and clothing a surface with a three dimensional panel.

34. A server, according to any one of claims 27 to 33, wherein said process apportioning means includes means to allocate the location for each action in the construction of an element.

35. A server, according to any one of claims 27 to 34, wherein said capability determination means is operative to interrogate said client from said server.

36. A server, according to claim 35, wherein said interrogation of said client includes said client informing said server of said client's abilities.

37. A server, according to any one of claims 27 to 36, wherein said capability determination means is operative to cause said server to reference a list of client characteristics for a plurality of different types of client.

38. A server, according to any one of claims 27 to 37, wherein said meeting of task requirements includes: falling within the minimum time to execute; and being the fastest to execute.

39. A server, according to any one of claims 27 to 38, wherein said server is a server in a mobile telephone system, and said client is a mobile telephone device.

40. A client, operative to receive, construct and display a processed image, comprising one or more elements, sent from a server, said client comprising; means to co-operate with parameter determination means, operative to determine the parameters for data transfer from said server to said client; means to co-operate with capability determination means, operative to determine the capability of said client; means to co-operate with task requirements determination means, operative to determine the task requirement; and means to co-operate with processing apportioning means, operative to apportion the processing between said server and said client for each element to meet said task requirement.

41. A client, according to claim 40, wherein said parameters for data transfer from said server to said client include one, all or some of: the transmission bandwidth of said server; the reception bandwidth of said client; the bandwidth of said data channel; the transmission protocol employed between said server and

said client; and the accessibility of the channel employed between said server and said client.

42. A client, according to claim 40 or claim 41, wherein said capabilities of said client include one, all or some of: the data processing speed of said client; the available memory of said client; the size of display in said client; and the data processing software available within said client.

43. A client, according to any one of claims 40 to 42, wherein said task requirements comprise one, all or some of: the maximum time from transmission to display of the image; and the minimum display resolution of the image.

44. A client, according to any one of claims 40 to 43, wherein each element can be constructed for display using a selectable one of a plurality of processing options, said client being co-operative with selection means, operative to select an option that meets the task requirements.

45. A client, according to any one of claims 40 to 44, for use where said construction of an element comprises one, all or some of: clothing a coarse mesh with a simple texture; clothing a fine mesh with a simple texture; clothing a coarse mesh with a complex texture; clothing a fine mesh with a complex texture; clothing a surface with a complex texture; clothing a surface with a simple texture; and clothing a surface with a three dimensional panel.

46. A client, according to any one of claims 40 to 45, wherein said process apportioning means includes means to allocate the location for each action in the construction of an element.

47. A client, according to any one of claims 40 to 46, wherein said capability determination means is operative to interrogate said client from said server.

48. A client, according to claim 47, wherein said interrogation of said client includes said client informing said server of said client's abilities.

49. A client, according to any one of claims 40 to 47, wherein said capability determination means is operative to cause said server to reference a list of client characteristics for a plurality of different types of client.

50. A client, according to any one of claims 40 to 49, wherein said meeting of task requirements includes: falling within the minimum time to execute; and being the fastest to execute.

51. A client, according to any one of claims 27 to 38, wherein said server is a server in a mobile telephone system, and said client is a mobile telephone device.